BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 91-141-G - ORDER NO. 91-1003 NOVEMBER 27, 1991

IN RE: Application of Piedmont Natural Gas) ORDER APPROVING Company for Authority to Adjust and) RATES AND CHARGES Increase its Natural Gas Rates and) Charges.

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (hereinafter the "Commission") by way of the Application of Piedmont Natural Gas Company, Inc. (hereinafter "Piedmont" or "the Company"), filed on May 24, 1991, for an increase in certain rates and charges for natural gas services provided by the Company in South Carolina and for approval of revised tariffs and service regulations. The Application was filed pursuant to S.C. Code Ann., Section 58-5-240, (Law Co-op. 1977 & Cum. Supp. 1990), as amended, and R.103-830, et. seq. of the Commission's Rules and Regulations.

According to the Company's application, its proposed rates and charges would have produced additional gross revenues of \$4,415,368 had they been in effect for the twelve-month period ending January 31, 1991. The Company's presently authorized rates and charges were approved by Order No. 86-1145, dated November 14, 1986, in Docket No. 86-217-G.

On June 3, 1991, the Commission's Executive Director instructed the Company to cause to be published a prepared Notice of Filing and Hearing once a week for three consecutive weeks in newspapers of general circulation in the Company's service area. The Notice of Filing and Hearing indicated the nature of the Company's Application and advised all interested parties desiring to participate in the proceeding of the manner and time in which to file the appropriate pleadings. It also indicated that a hearing would be held in the instant proceeding on October 2, 1991. The Company was required to notify directly all customers affected by the proposed rates and charges. On July 22, 1991, the Company furnished affidavits and certification demonstrating that the Notice of Filing and Hearing had been duly published and mailed to each customer affected by the rates and charges proposed by the Company's Application.

On July 24, 1991, the Commission's Executive Director instructed the Company to cause to be published a second prepared Notice of Filing and Hearing once a week for three consecutive weeks in newspapers of general circulation in the Company's service area. The second Notice of Filing and Hearing indicated that the Commission Staff was (1) intending to examine the process of adjusting the Company's Application to reflect normal weather conditions since the 1990-91 winter period was warmer than normal and (2) planning to examine a procedure which would automatically adjust rates up and down in the future to reflect conditions which vary from normal weather conditions during the winter period. The

notice further advised all interested parties desiring to participate in the proceeding of the manner and time in which to file the appropriate pleadings. It also indicated that a hearing would be held in the instant proceeding on October 2, 1991. The Company was again required to notify directly all customers affected by the proposed rates and charges. On August 27, 1991, the Company furnished affidavits and certification demonstrating that the second Notice of Filing and Hearing had been duly published and mailed to each customer affected by the rates and charges proposed by the Company's Application.

A Petition to Intervene was filed with the Commission on behalf of Steven W. Hamm, Consumer Advocate for the State of South Carolina (hereinafter the "Consumer Advocate").

Pursuant to notice given in accordance with the applicable provisions of law and with the Rules and Regulations of the Commission, a public hearing was held commencing on October 2, 1991, the Honorable Marjorie Amos-Frazier presiding. Appearances were entered by John E. Schmidt, III, Esquire, and Jerry W. Amos, Esquire, on behalf of the Company; Carl F. McIntosh, Esquire, on behalf of the Consumer Advocate; and F. David Butler, Esquire, Staff Counsel, on behalf of the Commission Staff.

The Company presented six witnesses on its behalf: (1) John H. Maxheim, Chairman of the Board, President and Chief Executive Officer; (2) Barry L. Guy, Vice President and Controller; (3) Robert O. Pritchard, Manager of Rate Administration; (4) Dr. Donald A. Murry, Economist with C.H. Guernsey & Company; (5) Charles W.

Fleenor, Vice President of Gas Supply; and (6) Ware F. Schiefer, Senior Vice President of Gas Supply and Transportation.

The Consumer Advocate presented three witnesses: (1) Philip E. Miller, Utility Regulatory Consultant, Columbus, Ohio; (2) Stephen G. Hill, Financial Consultant, Hurricane, West Virginia; and (3) Ralph M. Griffin, Professional Engineer and Utility Consultant, Millerstown, Pennsylvania.

The Commission Staff presented four witnesses: (1) Dr. James Edward Spearman, Assistant Public Utilities Economist; (2) Jacqueline R. Cherry, Accountant; (3) James S. Stites, Chief of the Gas Department; and (4) Brent L. Sires, Utilities Rate Analyst.

The record consists of five volumes of transcribed testimony and sixty-three hearing exhibits. The Consumer Advocate filed proposed findings and Piedmont filed a memorandum brief and a proposed order.

In the consideration of the evidence in the record before us, the Commission has remained mindful of our statutory responsibility, delineated by S.C. Code Ann., Sections 58-5-210, et. seq. (Law Co-op. 1977), to determine the lawfulness and reasonableness of rate adjustments proposed by public utilities. In the due exercise of the responsibility and for the reasons more fully discussed herein, the Commission has determined that a rate of return on equity of 12.0% to 12.25% and an overall rate of return on rate base resulting from the Company's gas operations of 11.07% to 11.21%, based on adjusted test year operations, is fair and reasonable. In order to have the opportunity to achieve an

overall rate of return on rate base of 11.07%, the Company would have required additional annual revenues of \$3,015,150. Founded upon the Company's test year operating and financial experience as adjusted, the Commission has concluded that the allocation of the additional revenue, as provided herein, meets the applicable statutory criteria and is consistent with other pertinent legal pronouncements. Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed2d 333 (1944); Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed 1176 (1923); Southern Bell Tel. and Tel. Co. v. Public Service Commission of South Carolina, 270 S.C. 590, 244 S.E.2d 278 (1978).

II. THE COMPANY

The Company is incorporated under the laws of the State of New York and is duly authorized by its Articles of Incorporation to engage in the business of transporting, distributing and selling natural gas outside of New York. It is duly domesticated and is engaged in conducting the business above mentioned in the States of South Carolina, North Carolina and Tennessee. It is a public utility under the laws of South Carolina, and its public utility operations in South Carolina are subject to the jurisdiction of this Commission. See S.C. Code Ann., Section 58-3-140(A) (Law Co-op. 1977 & Cum. Supp. 1990). The Company provides its natural gas services in 18 cities and towns located in South Carolina, with the cities of Greenville, Spartanburg and Anderson being the largest of the South Carolina communities served by the Company.

Within its service area, the Company provides its natural gas services to approximately 71,000 customers.

III. TEST YEAR

A fundamental principle of the ratemaking process is the establishment of a test year period. Ideally, such a period should be represented by the most recent twelve months preceding the date of filing a rate adjustment application for which data is available. While the rates and charges finally approved will have prospective effect only, this Commission has routinely adhered to the view that the immediate past experience, characterized by identifiable operating results for a complete twelve-month period, provides the most reliable guide for the immediate future. The reliance upon the test year concept, however, is not designed to preclude the recognition and use of other historical data which may precede or postdate the selected twelve-month period.

Integral to the use of an average year, representing normal operating conditions to be anticipated in the future, is the necessity to make normalizing adjustments to the historic test year figures. Only those adjustments which have reasonable and definite characteristics and which tend to influence reflected operating experience are made to give proper consideration to revenues, expenses and investments. Southern Bell, supra, 244 S.E.2d at 284. Adjustments may be allowed for items occurring in the historic test year but which will not recur in the future; or to give effect to items of an extraordinary nature by either normalizing or annualizing such items to reflect more accurately their annual

impact; or to give effect to any item which should have been included or excluded during the historic test year.

In the instant proceeding, the Company's Application was based on actual operating experiences for the twelve-month period ending January 31, 1991, and included financial and operating information for that period. The Commission Staff and the Consumer Advocate likewise presented their evidence generally within the context of the same test period. In consideration of the relative proximity of the commencement of this proceeding, the Commission finds the twelve months ended January 31, 1991, to be a reasonable period for which to make our ratemaking determination herein.

IV. Accounting and Pro Forma Adjustments

Certain adjustments affecting revenues and expenses were included in the exhibits and testimony offered by witnesses for the Company, the Commission Staff, and the Consumer Advocate. This Order will discuss in detail only those accounting and pro forma adjustments which represented differences in regulatory treatment of the respective items.

A. Revenues

1. Adjustment to Reflect Current Rates.

The Company and the Staff both adjusted revenues from the sale and transportation of gas by \$2,634,095 to reflect rates approved in Piedmont's last rate case, Docket No. 86-217-G, and to reflect purchased gas adjustments (PGAs) as approved in PGA-76 to become effective November 1, 1991. In view of the Commission's rejection of the retention factor, infra, the Commission finds that this

figure must be adjusted upward by the amount of the retention factor, i.e. \$77,069. The modified adjustment obtained is \$2,711,164. The Commission finds that the adjustment is appropriate, and therefore adopts it.

2. Retention Factor.

The Company and the Staff both propose to decrease revenues by \$77,069 for a retention factor. Company witness Pritchard explained that the objective of the retention factor is to prevent the Company's pro forma revenue from being overstated and to provide the Company with a reasonable opportunity to earn the rate of return found fair by the Commission. Tr., Vol. 2, Pritchard at 11. Company witness Pritchard further explained that the Company, when it files new rate schedules with the Commission in a general rate case, must estimate the revenue which the new rates will produce. This estimate is a two step process. Step one is to multiply the volumes of gas expected to be sold by the rates at which those volumes would be sold if all volumes were sold at the filed rate. For example, if the Company's rate were \$1.00 per unit and if the Company expected to sell 1,000,000 units of gas at the full filed rate, the Company would project revenues of \$1,000,000 (1,000,000 units x \$1.00). According to Company witness Pritchard, the Company does not sell all of its gas at the filed rate; therefore, in step two of the process, it reduces the revenue computed in step one to account for those volumes which will not be sold at the filed rate. He explained that the Company does not sell all of its gas at the filed rate because it makes adjustments

to customers' bills for reasons such as misread meters, malfunctioning meters, customer complaints, the proration of bills due to curtailment, and the proration of bills when customers begin or terminate service during the course of a billing cycle. Tr., Vol. 2, Pritchard at 11-18.

The Consumer Advocate objects to the use of the retention factor. According to Consumer Advocate witness Miller, the retention factor is inconsistent with proper ratemaking standards. The purpose of a test year is to provide representative results that are expected to occur in the future, i.e., it is intended to be representative of future conditions. This Commission agrees and holds that the use of the retention factor results in speculating that the future conditions are going to be identical to the conditions that existed during the test year concerning terminations, new customer additions, curtailment, and other This Commission believes that the sales levels and the numbers of customers which existed during the test year (adjusted, of course, for any abnormalities) are the appropriate surrogate for future conditions. As witness Miller states, the customers that the Company had during the test year will produce the facilities revenues generated by multiplying the facilities charge times the average number of customers. It may be true that some customers will terminate and perhaps their bills will be prorated. Yet, as long as new customers are added, the facilities charge revenue will be higher than that based upon test year numbers. To further reduce these test year amounts is impractical and inappropriate.

Simply stated, it is not consistent with good ratemaking principles to assume that minor adjustments which have occurred during a particular accounting period, such as those which have been described, are going to occur again in the future period without some study over a number of years to show the effect between the actual revenues which have been generated against those which would be generated absent those adjustments. Tr., Vol. 3, Miller at 102-103. The Commission therefore, adopts the reasoning of the Consumer Advocate as stated, and rejects the use of the retention factor.

3. Weather Normalization.

The Staff and the Consumer Advocate contend that weather normalization would be appropriate if the Commission were to also adopt a Weather Normalization Adjustment ("WNA") tracker. The Company strongly objected to weather normalization in this case. At the hearing, the Company and the Staff agreed to the following proposal:

- 1. The WNA tracker proposed by the Staff should become effective on the first billing cycle of the month following a date which is 365 days after the effective date of the rates established in this proceeding.
- 2. The WNA tracker will be based on the "normal" weather proposed by the Staff in this proceeding. Tr., Vol. 4, Stites at 206-216. (Also see our Order No. 91-971, dated November 1, 1991, in Docket No. 91-342-G and the appendices thereto as an example of the appropriate use of "normal" weather, utilizing a 30-year average

and a standard formula.)

3. For the purpose of the WNA tracker, demand gas costs will be allocated to the various rate schedules as included in this rate case as follows:

Rate Schedule	Demand Allocation per dekatherm
Rate 201	\$ 0.9968
Rate 202	\$ 0.8365
Rates 203 & 213	\$ 0.5744
Rates 204 & 214	\$ 0.3908

The demand cost allocation set forth above will be adjusted as provided in the Company's PGA to reflect any changes in demand costs up to the date of implementation of the WNA tracker.

- 4. On the effective date of the WNA tracker, the Company will reduce its rates by \$2,635,563. The rate reduction will be allocated among the various rate schedules in the same manner as the rate increase in this proceeding was allocated. For example, if Rate 201 receives 60% of the total rate increase, it will receive 60% of the total rate reduction.
- 5. During the one-year period prior to the effective date of the WNA tracker, the Company agrees to use reasonable means to notify and educate its customers concerning the application of the WNA.
- 6. The Company will file quarterly reports with the Commission during the one-year period prior to the effective date of the WNA tracker. These reports will show the results of South

Carolina operations for the twelve months ended each quarter to include annualization of cost of gas and revenues.

- 7. The WNA tracker will remain in effect until the Company's next general rate case, at which time the Company and the Staff will report to the Commission on the operation of the WNA tracker and each shall make a recommendation as to whether or not the WNA tracker should be continued.
- 8. Nothing in this proposal shall limit the right of the Company to file future rate cases or the right of the Staff to recommend to the Commission that the Commission investigate the Company's earnings level.
- 9. The Company and the Staff agree to work together prior to the implementation of the WNA tracker to resolve any details required for the proper implementation of the WNA tracker. A representative of the Consumer Advocate will be invited to participate in this endeavor.

The Commission finds that the proposal submitted by the Company and the Staff may provide benefits to the Company's ratepayers and is fair and reasonable; therefore, the Commission will adopt the terms of the proposal on an experimental basis, as per the terms of the proposal. (The Consumer Advocate was not a party to this proposal, but supported the concept of the Weather Normalization Adjustment through the testimony of Philip Miller and Ralph Griffin. Tr., Vol. 3, Miller at 98-101; Tr., Vol. 4, Griffin at 75-78.) As per the proposal, the parties shall work together to formulate the details of implementation of the WNA. The WNA, as

implemented, should be consistent with the WNA adopted in our Order No. 91-971, dated November 1, 1991, in Docket No. 91-342-G. parties reach an agreement, it shall be submitted to this Commission for approval, and a supplemental Order shall be issued. If the parties cannot reach an agreement as to the details of the implementation of the WNA, then this Commission shall hold a supplemental hearing on the issue, and thereafter issue its The Commission has also considered the 5% band supplemental Order. proposed by the Consumer Advocate, as well as the testimony presented by the Consumer Advocate calling for immediate implementation of the WNA. The Commission hereby rejects the Consumer Advocate proposals, since it believes that the Staff-Company proposal is more appropriate. The Commission is of the opinion that a one-year educational period on the WNA in the Piedmont service territory is appropriate. The Commission again notes that the Consumer Advocate has been invited to participate in conferences that will be held to implement details of the WNA.

B. Cost of Gas

Going Level Basis.

The Company and the Staff both adjusted the cost of gas by \$4,309,119 to reflect the wholesale gas rates effective November 1, 1991, as reflected in PGA-76. The Commission finds that the adjustment is appropriate.

2. Unaccounted For.

In its filing, the Company proposed to base unaccounted for volumes on the same percent of total deliveries as approved in the

last general rate case, Docket No. 86-217-G. The use of this percentage (1.13%) results in unaccounted for volumes of 239,568 dekatherms. The Consumer Advocate proposed to base unaccounted for volumes on the average unaccounted for volumes for the five years ending January 31, 1987, through January 31, 1991 (1.02%), which results in unaccounted for volumes of 201,878 dekatherms. Due to the fact that the differences between the Company's and the Consumer Advocate's unaccounted for volumes are small and to the fact that the unaccounted for volumes are subject to a true-up to actual volumes in the Company's PGA, the Commission finds the Company's unaccounted for volumes are appropriate for use in this case, and adopts same.

C. Payroll Expenses

In its filing, the Company proposed to increase payroll expenses by \$541,116 to bring payroll expenses to a going level basis. The Staff proposes to reduce this amount to \$501,298. Since the application in this case was filed in May of 1991, the Company estimated the payroll expenses that would be in effect as of July 31. The Staff did not file its testimony until September of 1991; therefore, the Staff was able to use actual payroll expenses. At the hearing, the Company accepted the Staff's adjustment. The amount included by the Staff, and agreed to by the Company, is known and measurable since it represents the annual payroll at the level actually in effect as of Staff's audit, and the Commission concludes that the Staff's adjustment is appropriate.

D. Salary and Payroll Investment Expenses.

In its filing, the Company proposed to increase salary and payroll investment plan expenses by \$21,040 to bring these expenses to a going level basis. The Staff proposes to reduce this amount to \$19,839. Because of the timing of the filing of the application, the Company estimated these expenses. The Staff was able to use actual expenses. At the hearing, the Company agreed with the Staff's adjustment. The amount included by the Staff, and agreed to by the Company, is known and measurable since it represents the annual salary and payroll investment plan expenses at the level actually in effect as of Staff's audit; therefore, the Commission concludes that the Staff's adjustment is appropriate.

E. Pension Expenses.

In its filing, the Company proposed to increase pension expenses by \$170,932 to bring these expenses to a going level basis. The Staff proposes to reduce this amount to \$169,027.

Again, because of the timing of the filing of the application, the Company estimated these expenses, and the Staff was able to use actual expenses. At the hearing, the Company accepted the Staff's adjustment. The amount included by the Staff, and agreed to by the Company, is known and measurable as of Staff's audit; therefore, the Commission concludes that the Staff's adjustment is appropriate.

F. Insurance Expenses.

In its filing, the Company proposed to increase insurance expenses by \$155,943 to bring these expenses to a going level basis. The Staff proposes to reduce this amount to \$85,420. Again, because of the timing of the filing of the application, the Company estimated these expenses, and the Staff was able to use actual expenses. At the hearing, the Company accepted the Staff's adjustment. The amount included by the Staff, and agreed to by the Company, is clearly known and measurable since it represents the annual insurance expenses at the level actually in effect as of Staff's audit; therefore, the Commission concludes that the Staff's adjustment is appropriate.

G. Uncollectibles.

In its filing, the Company proposed to decrease the provision for uncollectibles by \$2,142 to bring this expense to a going level basis. The Staff proposed to decrease the provision for uncollectibles by \$5,191. The difference results from the fact that the Company used a bad debt percentage of .1993% and the Staff used a bad debt percentage of .1899% and the difference in operating revenues between the Company and the Staff. At the hearing, the Company accepted the Staff's bad debt percentage of .1899%. This results in a decrease to the provision for uncollectible accounts of \$10,205. The remaining differences of \$5,014 between the Company and the Staff relates to the revenue adjustments for weather normalization and the exclusion of the retention factor. Because of our previous holding with respect to

weather normalization, it would not be appropriate to apply the bad debt percentage to weather normalized volumes.

H. Expenses for Drug Screening.

The Company and the Staff both proposed to increase the expenses for drug screening by \$2,408 to a going level basis. No party contested this adjustment, and the Commission finds that the adjustment is appropriate.

Postage Expenses.

In its filing, the Company proposed to increase postage expense by \$40,357 to reflect current postage rates. The Staff proposes to increase postage expense by \$39,236. At the hearing, the Company accepted the Staff's adjustment. The Staff's adjustment reflects postage rates which are currently in effect and, therefore, are known and measurable. No party opposed this adjustment, and the Commission finds that the Staff's adjustment is appropriate.

J. Membership Fees and Dues.

The Company and the Staff both proposed to decrease operation and maintenance expenses to remove \$6,124 of membership fees and dues which are not applicable to Piedmont's South Carolina public utility operations. No party opposed this adjustment, and the Commission concludes that the adjustment is appropriate.

K. Non-Utility Expenses.

In its filing, the Company proposed to decrease operation and maintenance expenses to remove \$76,534 of expenses which should be allocated to the Company's non-utility activities. The Staff

proposed to decrease operation and maintenance expenses by \$76,369. At the hearing, the Company accepted the Staff's proposed adjustment, and the Commission concludes that the Staff's adjustment is appropriate.

L. Miscellaneous Expenses.

In its filing, the Company proposed to decrease operation and maintenance expenses to remove \$11,730 of miscellaneous expenses which are not applicable to the Company's South Carolina public utility operations. The Staff proposed to remove \$10,390 of these expenses. At the hearing, the Company accepted the Staff's adjustment, and the Commission concludes that the Staff's adjustment is appropriate.

M. Tennessee Operations.

In its filing, the Company proposed to decrease Corporate Office operating expenses by \$5,941 to remove amounts which are applicable to the Company's Tennessee operations. The Staff proposed to remove \$5,302 of these expenses. At the hearing, the Company accepted the Staff's proposed adjustment, and the Commission concludes that the Staff's adjustment is appropriate.

N. Rate Case Expenses.

In its filing, the Company proposed to increase rate case expenses by \$20,667 to bring rate case expenses to a going level. The Staff proposed to increase these expenses by \$19,710. (See Hearing Exhibit 55.) At the hearing, the Company accepted the Staff's adjustment. The Consumer Advocate also accepted the Staff's adjustment at the hearing. The Commission concludes that

the Staff's adjustment is appropriate.

Long-Term Incentive Plan.

The Company proposed to decrease the expenses for the Company's long-term incentive plan (Plan) by \$140,060 to bring it to a going level basis. The Staff proposed to decrease these expenses by \$406,678 unless the Company provided the Staff with "detailed workpapers concerning the numerical benefits of this Plan to the Company's ratepayers." The Consumer Advocate also proposed that the Commission reduce test year expenses to remove all costs of the Plan unless the Company demonstrated that the Plan provides some benefits to the consumers.

At the hearing, the Company offered evidence showing how the Plan benefits ratepayers, and the goal of the Plan. The goal of the Plan is that the Company must achieve a minimum of five (5%) percent per year increase in its net income for a five year period, adjusted for inflation. Tr., Vol. 5, Maxheim at 122. Among the benefits proposed by the Company are the following:

- (1) This is the first rate case filed in South Carolina by Piedmont since the adoption of the Plan in 1986. Since the adoption of the Plan, the Company has expanded plant by approximately \$63,000,000, a 92% increase in plant since the adoption of the Plan.
- (2) The Company has been adding customers at four times the national average.
- (3) The Company has been able to raise record amounts of capital at rates which are favorable to the Company's ratepayers.

- (4) The Company's management Planning Committee and the Company's senior management Information Technology Council identified fourteen areas of the Company's operations where significant cost saving benefits could and are being achieved. The total savings to ratepayers, over a five-year period, from implementing these programs is over \$16 million.
- (5) Management has developed gas purchasing programs which have saved ratepayers approximately \$43 million in gas costs over the past five years. (See Tr. 5, Maxheim at 57-59.) Also, we believe that the long-term incentive plan is needed to retain key management employees and to attract new employees. Id. The Plan proposed by the Company is similar to the one adopted by Southern Bell Telephone and Telegraph Company, and approved by this Commission previously.

In view of the Company's testimony, we find that the Company should recover the full cost of the Plan; therefore, the Commission finds that the adjustment proposed by the Company is appropriate.

P. Depreciation Expense.

Going Level Basis.

In its filing, the Company proposed to increase depreciation expense by \$352,397 to bring this expense to a going level basis. The Staff proposed to increase this expense by \$375,455. The Company used an estimate and the Staff used actual amounts. At the hearing, the Company accepted the Staff's adjustment. The amount calculated by the Staff, and agreed to by the Company, was

determined by applying previously approved depreciation rates to the amount of additional plant actually in place at the time of Staff's audit; therefore, this expense is clearly known and measurable. The Commission concludes that the Staff's adjustment is appropriate.

Depreciation Expense Associated with the Installation of New Meters.

The Staff proposed to eliminate depreciation expense associated with the estimated cost of installation of new meters of \$2,317. At the hearing, the Company accepted the Staff's adjustment. No party opposed the adjustment; therefore, the Commission concludes that the adjustment is appropriate.

Depreciation Expense Associated with Capitalized Equipment.

The Staff proposed to adjust depreciation expense by \$15 in connection with equipment which the Staff proposed to capitalize. Because of the <u>de minimis</u> nature of this adjustment, the Company accepted this adjustment. No party opposed the adjustment; therefore, the Commission concludes that the adjustment is appropriate.

Q. Property Taxes.

Going Level Basis.

The Company and the Staff both proposed to increase property taxes by \$147,883 to bring this expense to a going level basis. Since this adjustment is determined by applying known property tax rates to test year plant-in-service, it is clearly a known and

measurable expense. The Commission concludes that the adjustment is appropriate.

2. New Meters.

The Staff proposed to decrease property taxes by \$2,867 because of the adjustment associated with the estimated cost of installation of new meters. At the hearing, the Company accepted this adjustment. No party opposed the adjustment, and the Commission concludes that the adjustment is appropriate.

R. Payroll Taxes.

In its filing, the Company proposed to decrease payroll taxes by \$16,152 to bring this expense to a going level basis. The Staff proposed to decrease payroll taxes by \$19,468. Again, because of the timing of the filing of the application, the Company had to estimate these expenses and the Staff was able to use actual expenses. At the hearing, the Company agreed with the Staff's adjustment. The amount proposed by the Staff, and agreed to by the Company, is clearly known and measurable since it was determined by applying known tax rates to the payroll at the going level as of Staff's audit. The Commission concludes that the Staff's adjustment is appropriate.

S. License Fees and Gross Receipts Taxes.

In its filing, the Company proposed to increase license fees by \$7,902. The Staff proposed to increase license fees by \$16,056 and gross receipts taxes by \$6,786 for a total adjustment of \$22,842. At the hearing, the Company stated that it had inadvertently failed to include gross receipts taxes in its filing;

therefore, it accepted \$3,340 of the Staff's adjustment. The remaining \$11,600 (\$22,842 - \$11,242) of the Staff's adjustment relates to the revenue adjustment for weather normalization. Therefore, because of our finding with respect to weather normalization, we find that the remaining adjustment of \$11,600 is not appropriate. Also, because of our finding with respect to the retention factor, we find that an additional adjustment of \$329 is appropriate. The Commission concludes that an adjustment of \$11,571 (\$22,842 - \$11,600 + \$329) is appropriate.

T. Interest on Customer Deposits.

The Company and the Staff both proposed to increase interest on customer deposits by \$9,654 to the going level basis. Since this amount was determined by applying the interest rate prescribed by the Commission to the actual deposits at January 31, 1991, the adjustment is clearly known and measurable. No party opposed this adjustment, and the Commission concludes that the adjustment is appropriate.

U. Customer Growth.

At the hearing, the Company, the Staff and the Consumer Advocate agreed that it would be appropriate to use a growth factor of 4.12% if the Commission updates plant to July 31, 1991. See Hearing Exhibit 33. As hereinafter discussed, the Commission will update plant to July 31, 1991; therefore, the Commission concludes that a growth factor of 4.12% is appropriate, and adopts an adjustment of \$43,181.

v. Non-Allowables.

The Staff proposed "to adjust expenses for non-allowables found in sample" by decreasing operation and maintenance expenses by \$55,928. The details of this adjustment are found in Staff witness Cherry's testimony. At the hearing, the Company stated that although it did not agree with many of the individual items which make up the total, it would not contest the adjustment because each of the individual items is de minimis; therefore, the Commission concludes that the Staff's adjustment is appropriate.

W. Allowance for Funds Used During Construction.

The Staff proposed to adjust Allowance for Funds Used During Construction (AFUDC) in an amount of \$120,784 for remaining Construction Work in Progress (CWIP) after the transfer of completed CWIP to plant in service. The Company did not propose any such adjustment because it did not propose to transfer any CWIP to plant-in-service. At the hearing, the Company accepted both the Staff's plant-in-service amounts and the Staff's adjustment to AFUDC; therefore, the Commission concludes that the Staff's adjustment is appropriate.

X. Non-Utility Operations.

The Staff proposed to allocate \$14,516 of officers' salaries to non-utility operations. The Staff also proposed to allocate \$1,628 to officers' vehicle costs non-utility operations. At the hearing, the Company stated that it did not agree with these adjustments, but would accept them since they are de minimis; therefore, the Commission concludes that these adjustments are

appropriate.

Y. Increases in Officers' Salaries.

The Staff and the Consumer Advocate proposed to eliminate increase in officers' salaries for the test year in the amount of \$23,391. The Company opposed this adjustment. The Company took the position that these increases had not been eliminated in previous Company proceedings, that the increases are known and measurable, and that they are reasonable. Tr. Vol. 5, Maxheim, at 60-61. However, the Commission precedent in other major utility rate proceedings demands an exclusion of these increases in officer's salaries for ratemaking purposes. Therefore, we hold that the Company's test year operation and maintenance expenses must be reduced by \$23,391 to exclude these increases.

Advertising Expenses.

The Consumer Advocate proposed to eliminate \$191,909 from Account No. 917 because, in the opinion of Consumer Advocate witness Miller, the Company did not justify these expenditures. Tr. Vol. 3, Miller, at 112-115. The Commission disagrees. The Commission Staff examined the Company's advertising expenses and removed all expenses not allowable under the Commission's policies, i.e. \$14,276 which was for advertising of an institutional nature, and which did not provide any benefits to the ratepayer. Tr. Vol. 4, Cherry, at 178-179. (See deduction under non-allowables, supra.) Furthermore, the Company offered evidence as to its need for certain types of advertising and the benefits of those types of advertising to ratepayers.

Company witness Maxheim stated that consumers can reduce their heating costs by a considerable amount by using natural gas. In addition, natural gas is an environmentally clean fuel. Unless consumers know that gas is available to them, they will not subscribe. Therefore, when extending into new service areas, the Company must advise potential customers of the availability of gas.

Company witness Maxheim further stated that advertising offers advantages to ratepayers because advertising helps add new customers on existing gas mains. As new customers are added, the costs of the mains are spread among more customers, thereby reducing the amount allocated to any individual customer. Tr. Vol. 5, Maxheim at 79-81.

For all of the foregoing reasons, the Commission finds the Consumer Advocate's proposal to eliminate all the expenses in Account No. 917 is not appropriate, and therefore denies said proposal. Staff's adjustment is adopted.

AA. Lobbying Expenses.

The Consumer Advocate proposed to reduce operation and maintenance expenses by \$5,000 for lobbying expenses. The Consumer Advocate did not offer any evidence to show that any lobbying expenses were included in the Company's filing, (See Tr., Vol. 3, Miller at 32) and at the hearing the Company testified that it did not have any lobbying expenses associated with its South Carolina operations during the test period, and that it is not seeking to recover any lobbying expenses from ratepayers in this proceeding. Tr., Vol. 1, Guy at 112-113. Therefore, the Commission rejects the

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Consumer Advocate's proposal.

AB. American Gas Association Dues.

The Consumer Advocate proposed to reduce test year operation and maintenance expenses by \$6,733 (12.5% of total AGA dues of \$53,861) to eliminate dues and expenses to the American Gas Association because "not all of the AGA expenses provide a direct and primary benefit to consumers." Consumer Advocate witness Miller also stated that many of the expenses paid for by AGA dues "by their very nature may suggest direct and primary benefits to the Company's customers." Tr. Vol. 3, Miller at 118. witness Maxheim responded that the AGA offers many benefits to the Company and its ratepayers. Among these benefits is the providing of current information concerning activities pending before the Federal Energy Regulatory Commission and other federal and state regulatory agencies. The AGA also provides essential information with respect to the current gas supply situation, and this information helps the Company purchase adequate supplies of gas at lower prices for its customers. In addition, the AGA provides valuable information on such important matters as conservation of gas, guidance and counseling in the area of affirmative action programs, data processing and efficient management techniques. All of this information ultimately results in a more efficient operation of the Company's business and in savings to customers. The Company takes full advantage of numerous meetings, seminars and publications sponsored by the AGA to exchange this currently needed information. The AGA uses its dues primarily to provide services

to its member companies and, through them, to gas users. Tr., Vol. 5, Maxheim at 82-87.

The Commission concludes that AGA dues provide a direct and primary benefit to ratepayers; therefore, the Consumer Advocate's proposed adjustment to eliminate all AGA dues and expenses is rejected. The Commission notes, however, that 1.88% of these AGA dues are for lobbying activities; therefore, the Commission will eliminate \$1,013 (.0188 x \$53,861) of the AGA dues. (See Tr. Vol. 5, Maxheim at 86, and Hearing Exhibit 56.)

AC. Other.

All other adjustments proposed by the Staff and not objected to by any party have been considered and are approved.

AD. Taxes.

The Commission has adjusted general taxes and state and federal income taxes to reflect all adjustments herein approved.

v. Rate Base

While there is no express statutory requirement that the Commission determine the value of a gas utility's property devoted to the public service and give appropriate consideration to such property in the context of a ratemaking proceeding, this Commission has traditionally and consistently done so in general ratemaking proceedings involving gas utilities.

For ratemaking purposes, the rate base is the total net value of the gas utility's tangible capital or property value on which the gas utility is entitled to earn a fair and reasonable rate of return. The rate base, as derived in this proceeding, is composed

of the value of the Company's property used and useful in providing gas service to the public, materials and supplies, and an allowable for cash working capital. The rate base computation incorporates reductions for accumulated depreciation, customer advances for construction, customer deposits, accumulated deferred income taxes and unclaimed funds.

In accordance with its standard practice, the Accounting
Department of the Commission Staff conducted an audit and
examination of the Company's books and verified all account
balances from the Company's General Ledger, including rate base
items, with plant additions and retirements. On the basis of this
audit, the pertinent hearing exhibits and the testimony contained
in the record of the hearing, the Commission can determine and find
proper balances for the components of the Company's rate base as
well as the propriety of related accounting adjustments.

When the rate base has been established, the Company's total operating income for return is applied to the rate base to determine what adjustments, if any, to the present rate structure are necessary to generate earnings sufficient to produce a fair rate of return. The rate base should reflect the actual investment made by investors in the Company's property and the value upon which stockholders will receive a return on their investment.

This Commission's determinations relative to the Company's rate base for its gas operations appear in the following subsections:

A. Plant-in-Service.

The Commission has traditionally used the regulatory accounting methodology recognized as "original cost less depreciation" in the determination of the value of a gas utility's plant-in-service. In its filing, the Company included per book plant-in-service of \$113,077,614 plus an adjustment of \$4,413,031 to reflect plant additions expected through July 31, 1991, making a total plant-in-service of \$117,490,645. The Staff included per book plant-in-service of \$107,950,136, plus the following adjustments: \$10,393,073 to reflect plant additions actually occurring through July 31, 1991, \$655 to capitalize equipment that was expensed by the Company, (\$3,659) to remove vehicles that are non-utility related and (\$139,574) to remove the estimated cost of installation of new meters. At the hearing, the Company agreed to the Staff's plant-in-service amount. The total plant-in-service amount proposed by the Staff and agreed to by the Company is \$118,200,631. Hearing Exhibit 47; Accounting Exhibit A.

The Consumer Advocate contended that the Commission should determine plant-in-service at the end of the test year without any adjustments. The Commission disagrees with the Consumer Advocate. The plant-in-service amount proposed by the Staff and agreed to by the Company was in service at July 31, 1991, was used and useful for the public, and was known and measurable. The Consumer Advocate also contended that if the Commission utilizes plant-in-service at July 31, 1991, it should adjust the growth factor to that date. (See Tr., Vol. 3, Miller at 91-92.) All

parties appear to be in agreement with that suggestion, and the Commission has previously approved a growth factor of 4.12% to take into account revenues and expenses through July 31, 1991. For all of the above reasons, the Commission concludes that the proper amount of plant-in-service to be included in the Company's rate base is \$118,200,631.

B. Accumulated Depreciation.

In determining the proper rate base for gas utilities, the Commission uses the gross plant in service dedicated to providing public service as reduced by the reserve for depreciation and The reserve represents that portion of the utility's amortization. depreciable properties which has been consumed by previous use and recorded as depreciation. The Staff's per book accumulated depreciation was (\$30,613,987). The Staff proposed to adjust accumulated depreciation by (\$375,455) as a result of annualizing depreciation expenses to reflect test year-end plant balances and plant additions through July 31, 1991, by (\$15) as a result of the capitalization of equipment that had previously been expensed by the Company, by \$1,147 relating to non-utility vehicle plant and by \$2,317 to remove the estimated cost of the installation of new meters. At the hearing, the Company agreed with the Staff's adjustments. The Staff's adjustments for depreciation are consistent with the other adjustments set forth above; therefore, the Commission concludes that the proper amount of accumulated depreciation to be included in the Company's rate base is (\$30,985,993). Hearing Exhibit 47, Accounting Exhibit A.

C. Construction Work in Progress.

This Commission has traditionally considered the reasonable and necessary costs of construction of utility plant not yet in service to be a proper rate base item. Such costs are described as "construction work in progress." Based on our findings above, the Commission concludes that \$985,588 is the proper amount for CWIP in this proceeding.

D. Materials and Supplies.

The Commission has traditionally considered "materials and supplies" to be a proper item to be included in a gas utility's rate base. In this instant proceeding, the "per books" amount for materials and supplies was \$6,371,014. No party proposed any adjustment to this amount; therefore, the Commission finds \$6,371,014 to be the appropriate amount for materials and supplies in this proceeding.

E. Cash Working Capital.

The Commission considers an allowance for working capital to be an appropriate item for inclusion in the rate base of a gas utility. By permitting a working capital allowance, the Commission acknowledges the requirement for capital outlay related to the routine operations of the utility. For many years, the Commission has computed the allowance for working capital to be the sum of one-eighth of operation and maintenance expenses, minimum bank balances and prepayments, reduced by the amount of average tax accruals. Tr. Vol. 4, Cherry at 182; Hearing Exhibit 47, Accounting Exhibit A-3. The Company proposed a cash working

capital allowance of \$552,147 based on the Commission's formula. The Staff agreed with the Company's amount. $\underline{\text{Id}}$.

The Consumer Advocate proposed that the Commission base cash working capital on a lead-lag study. The Consumer Advocate has made this suggestion in past cases before this Commission. Tr., Vol. 3, Miller at 93-96. In each such case, the Commission has rejected the Consumer Advocate's proposal. See, e.g., South Carolina Electric & Gas Company, Docket No. 87-227-G, Order No. 87-1294. The Commission has again considered the Consumer Advocate's arguments, but the Commission is not convinced that it should change its long-standing use of the formula method in the instant proceeding. Therefore, the Commission concludes that \$552,147 is the appropriate amount to include in rate base for the working capital allowance.

F. Customer Advances for Construction.

The item of customer advances for construction represents an additional component upon which the Commission considers investors are not entitled to earn a return. In the instant proceeding, the per book amount of customer advances for construction was (\$114,408). No party proposed any adjustment to this amount; therefore, the Commission finds (\$114,408) to be the appropriate amount for customer advances for construction in this proceeding.

G. Customer Deposits.

The amount representing customer deposits also is considered by this Commission to be an element on which the Company's investors are not entitled to earn a return and which should be

excluded from the Company's rate base. In the instant proceeding, the per book amount of customer deposits was (\$1,022,202). The Company increased this amount by (\$9,654) to reflect a similar adjustment to bring interest on customers' deposits to the going level basis. No party objected to these amounts; therefore, the Commission finds (\$1,031,856) to be the appropriate amount to be excluded from rate base attributable to customer deposits.

H. Accumulated Deferred Income Taxes.

The accumulated deferred income taxes constitute a form of cost-free capital, and, consequently, an element upon which the Commission feels investors are not entitled to earn a rate of return. The per books amount for accumulated deferred income taxes was (\$8,722,025). No party proposed any adjustment to this amount, therefore, the Commission finds (\$8,722,025) to be the appropriate amount for accumulated deferred income taxes in this proceeding.

T. Unclaimed Funds.

The Consumer Advocate proposed to remove \$20,546 of "unclaimed funds" from rate base. The Company agreed that "unclaimed funds" are cost-free capital. The Company agreed that \$20,546 of these funds related to the Company's South Carolina operations. Tr., Vol. 5, Maxheim at 65. Based on the above, the Commission concludes that the Company's rate base should be reduced by \$20,546 to remove amounts relating to unclaimed funds.

J. Deferred Account.

The Consumer Advocate proposed to reduce rate base to remove funds held in the Company's Deferred Account No. 253.04 under the Company's Commission-approved spot savings program. The Company presently pays 8.75% interest to ratepayers related to the funds held in this account in excess of gas costs which it has collected through its PGA and retained. (A limit of \$3,000,000 in this account was set by Commission Order No. 90-673, dated July 10, 1990, in Docket No. 89-11-G.) The Commission believes that a more reasonable method of giving ratemaking recognition to such ratepayer monies being kept by the Company is similar to recognition offered to customer deposits, namely to reduce rate base by a like amount. The approach was deemed reasonable by Commission Staff witness Cherry. Tr., Vol. 4, Cherry at 194. The Commission therefore holds that \$3,000,000 of the current account balance in the Company's Deferred Account (Account No. 253.04) should be removed from rate base.

K. Original Cost Rate Base.

The Company's rate base for its gas operations as herein adjusted and determined by the Commission to be appropriate for the purposes of this proceeding, is set forth in the following table:

VI. Capital Structure

The Staff proposed the following capital structure:

<u>Table B</u>

CAPITALIZATION

Long-Term Debt	\$191,866,027	43.68%
Common Equity	\$247,357,997	56.32%
TOTAL	\$439,224,024	100.00%

This capital structure represents the Company's actual capital structure at July 31, 1991. (See Hearing Exhibit 47, Accounting Exhibit A-4; Tr., Vol. 4, Cherry at 182.) The Company and Staff have agreed to the use of this capital structure. The Consumer Advocate, however, contended that the Commission should use a capital structure consisting of 49.16% equity and 50.84% debt. Tr., Vol. 4, Hill at 29. The Consumer Advocate's proposed capital structure consists of (1) "pro forma long-term debt" and (2) "pro forma common equity" less "non-utility equity." Hearing Exhibit

40, Schedule 4.

Before we could accept the Consumer Advocate's proposed capital structure, we would have to assume that the Company's non-utility operations are funded solely with equity. There is nothing in the record in this case upon which we can make such a finding.

The capital structure proposed by the Staff, and agreed to by the Company, represents the Company's actual capital structure at July 31, 1991. This is the capital structure that supports the Company's rate base on that date. We do not believe that it would be appropriate to adopt the hypothetical capital structure proposed by the Consumer Advocate.

Although the Consumer Advocate did not include short-term debt in the Company's capital structure, he contended that the Company is utilizing short-term debt to finance its rate base investment. Tr., Vol. 4, Hill at 23. Company witness Maxheim testified that Piedmont's short-term debt is temporary and is replaced from time to time with long-term debt; therefore, it does not represent permanent capital. Tr., Vol. 1, Maxheim at 72-73.

The Commission concludes that it would not be appropriate to consider short-term debt as a part of the Company's capital structure for the following reasons:

(1) We have not included short-term debt in the Company's capital structure in previous general rate cases.

- (2) Our decision not to consider short-term debt is consistent with most other state regulatory authorities. See e.g., Re Connecticut Natural Gas Corporation, 37 P.U.R. 4th 287 (Connecticut, 1980); Re Laclede Gas Co,. 24 P.U.R. 4th 241 (Missouri, 1978); Re Northern States Power Company, 24 P.U.R. 4th 252 (North Dakota, 1978); Re California-Pacific Utilities Co., 20 P.U.R. 4th 479 (Oregon, 1977); Re Montana-Dakota Utilities Co., 21 P.U.R. 4th 65 (Wyoming, 1977); Re Providence Gas Co., 22 P.U.R. 4th 36 (Rhode Island, 1977); Re Montana-Dakota Utilities Co., 22 P.U.R. 4th 1 (South Dakota, 1977).
- includes only permanent debt and equity and not short-term debt.

 In Re Public Service Company of Colorado, 41 P.U.R. 4th 225, 249 (1980), the Colorado Public Utilities Commission expressed its reasons for rejecting a recommendation to include short-term debt in a utility's capital structure as follows:

We agree that it is appropriate to eliminate short-term debt from the capital structure for several reasons. First, the level of short-term debt fluctuates greatly during any particular period....Second, short-term debt is nearly always replaced by the issuance of long-term debt and common and preferred stock. Finally, the cost of short-term financing is extremely volatile.

Similarly, the Connecticut Division of Public Utility Control rejected the inclusion of short-term debt. In Re Connecticut Natural Gas Corp., 37 P.U.R. 4th 287, 327 (1980), the Connecticut Division of Public Utility Control said:

Short-term debt represents an uncertain and variable portion of a company's liabilities and the cost of short-term debt is very volatile. Indeed, short-term debt is usually a transition to more permanent capital. Thus, we find it prudent to look only to long-term sources of capital for purposes of determining rate of return.

Likewise, in <u>Re Mountain States Tel. & Tel. Co</u>., 37 P.U.R. 4th 182 (1980), the Montana Public Service Commission refused to include short-term debt in a utility's capital structure, stating:

This Commission has consistently held that interim or short-term debt should not be included in capital structure used in rate making. Rate base is supported by permanent capital and not by interim financing. Mr. Danner acknowledged that Montana Bell always replaces its interim debt with long-term debt and common equity. Dr. Smith was correct in excluding short-term debt from Mountain Bell's capital structure in this proceeding.

Finally, in Re Southern Bell Tel. & Tel. Co., 21 P.U.R. 4th 451 (Florida, 1977), the Florida Commission stated:

The amount and cost of short-term debt varies over time. Historically, it has not been made a part of the capital structure because it does not represent permanent capitalization. Generally, it is rolled over into long-term debt or equity. Recognizing these factors, we do not find that it would be proper to impute short-term debt into capital structure in this case.

The reasoning of these various commissions applies with equal weight to this case. Company witness Maxheim testified that Piedmont's short-term debt is temporary and is replaced from time to time with long-term debt; therefore, it does not represent permanent capital.

VII. Cost of Capital

A. Long-Term Debt.

The Staff proposed, and the Company accepted, an embedded cost of long-term debt of 9.86%, which was the actual embedded cost of long-term debt at July 31, 1991. Tr., Vol. 4, Cherry at 182; Hearing Exhibit 47, Accounting Exhibit A-4. The Consumer Advocate proposed an embedded cost of long-term debt of 9.73%. Tr., Vol. 4, Hill at 30. The Consumer Advocate's embedded cost of long-term debt includes long-term debt issued after July 31, 1991.

In this proceeding, we have updated rate base to July 31, 1991. Likewise, we have updated the growth factor to July 31, 1991, to include changes to revenues and expenses. To obtain a proper matching of rate base and capitalization, it is appropriate to use the actual capital structure, and the embedded cost of long-term debt should be used in the determination of the Company's overall rate of return herein.

B. Common Equity.

Based on the adjustments approved herein, the Company's present rates would enable the Company to earn a return on its common equity of 7.78%. The Company seeks the approval of rates which it contends will give it a reasonable opportunity to earn a return on common equity of 13.75%.

Three witnesses offered testimony as to the appropriate cost of the Company's common equity. Company witness Murry testified that the current cost of the Company's common equity is 13.50% to 14.0%. Tr., Vol. 2, Murry at 70. Consumer Advocate witness Hill

testified that the current cost of the Company's common equity is between 11.25% and 11.75%. Tr., Vol. 4, Hill at 12. Commission Staff witness Spearman testified that the current cost of the Company's common equity was between 12.0% to 12.5%. Tr., Vol. 4, Spearman at 159.

The Commission cannot determine the fair and reasonable rate on common equity for the Company in isolation. Rather, the Commission must carefully consider a variety of relevant factors, including identifiable trends in the market relating to the costs of labor, materials and capital; comparisons of past earnings with present earnings and prospective earnings; the prices for which the Company's service must be rendered; the returns of other enterprises and the reasonable opportunities for investment therein; the financial policy and capital structure of the Company and its ability to attract capital; the competency and efficiency of the Company's management; the inherent protection against competition afforded the Company through the operation of the regulatory process; and the public demand for growth and system expansion which is required to evaluate the construction program for the foreseeable future. The Commission must strike the balance among these complex factors in the context of the record herein.

The Commission recognizes the necessity that the Company be allowed the opportunity to earn a fair return sufficient to enable the Company to continue to meet its service obligations and to maintain its financial strength for the future.

As an integral part of the process, the Commission must

gravely weigh the interests of the Company's customers in regard to the price of natural gas service with the interests of the same customers in regard to the reliability and adequacy of the supply of natural gas. We have kept those interests paramount through this proceeding.

Dr. Spearman employed two independent methods in the derivation of the conclusions expressed in his testimony in regard to his estimate of the rate of return which the Company should be allowed the opportunity to earn. The methodologies utilized were the Capital Asset Pricing Model and the discount cash flow approach. Dr. Spearman utilized financial data on Piedmont Natural Gas Company and Moody's Gas Distribution Index to estimate the cost of equity. Dr. Spearman recommended a range from 12.0% to 12.5%.

Mr. Stephen G. Hill utilized four methodologies to estimate the cost of equity for the Company. Mr. Hill's recommendations were based on results obtained from a discounted cash flow analysis, an earnings price ratio analysis, a market-to-book analysis and the Capital Asset Pricing Model. On the basis of his studies, Mr. Hill recommended that the Company's allowable return on equity would fall within a range from 11.25% to 11.75%.

Dr. Donald A. Murry developed a discounted cash flow analysis of the Company and a group of gas companies comparable to the Company. Based on his analysis, he recommended a cost of common equity in the range of 13.50% to 14.0%. He recommended that the Commission adopt the midpoint of that range, 13.75%, as the allowed return on common equity in this proceeding.

The Commission recognizes the legal principle and the practical necessity that the Company be allowed the opportunity to earn a fair rate of return to enable it to continue to meet its service obligations and to maintain its financial strength to provide for the attraction of capital.

In its determination of a fair and reasonable rate of return, the Commission maintains the ultimate responsibility of setting the rates to be charged for the utility services provided by the Company. The exercise of that responsibility involves the balancing of the interests of the consumer and the investor. The Commission must gravely balance the interest of the consumer in regard to the price of utility service with the interests of the same consumer in regard to the reliability and adequacy of the supply of energy. The Commission has maintained these interests paramount throughout this proceeding. The Commission's determinations of the Company's revenue requirements and of the proper allocation of those revenues within the approved rate structure embodied in this Order reflect fairly and equitably both the interest of those consumers and the interests of the Company.

In light of all relevant issues in the record of this proceeding, and, specifically, the rate of return studies of Dr. Spearman, the Commission is of the opinion, and so finds, that a fair and proper return on common equity is 12.00%-12.25%. The Commission further finds that a fair and proper return on common equity of 12.00% provides the opportunity to produce additional annual revenues of \$3,015,150 for the Company's South Carolina

operations, which the Commission finds fair and reasonable.

The range of rate of return on common equity of 12.00%-12.25% herein found fair and reasonable falls within the analysis conducted by Dr. Spearman. The Commission considers the results reached by Dr. Spearman to have incorporated effectively the expectations of the potential equity investor through the estimate of relevant risk of investment in the Company's equity relative to the market as a whole. The Commission considers that analysis to represent the reasonable expectation for the equity owner, and, therefore, to be consistent with the pertinent legal standards. This range of return of 12.00%-12.25% is fair and reasonable and is sufficient to protect the financial integrity of the Company, to preserve the property of the investor, and to permit the Company to continue to provide reliable service to present and future customers at reasonable rates.

VIII. Rate of Return.

An important function of ratemaking is the determination of the overall rate of return which the utility should be granted. This Commission has utilized the following definition of "rate of return" in previous decisions, and continues to do so in this proceeding:

For regulatory purposes, the rate of return is the amount of money earned by a regulated company, over and above operating costs, expressed as a percentage of the rate base. In other words, the rate of return includes interest on long-term debt, dividends on preferred stock, the earnings on common stock and surplus. As Garfield and Lovejoy have put it "the return is that money earned from operations which is available for

distributing among the various classes of contributors of money capital. In the case of common stockholders, part of their share may be retained as surplus."

Phillips, The Economics of Regulation, pp. 260-261 (1969).

The United States Supreme Court's landmark decision in Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), delineated general guidelines for determining the fair rate of return in utility regulation. In the Bluefield decision, the Court said:

What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for convenience of the public equal to that generally being made at the same time and in the same general part the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. should be reasonably sufficient to assure confidence in the financial soundness of the utility and be adequate under efficient and economical management, to maintain and support its credit and it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low changes affecting opportunities for investment, the money market, and business generally.

262 U.S. at 692-693.

During the subsequent years, the Supreme Court refined its appraisal for regulatory precepts. In its frequently cited Hope decision, supra, the Court restated its views:

We held in Federal Power Commission v. Natural Gas Pipeline Co. . . . that the Commission was not bound to the use of any single formula or combination of formula in determining its rates. Its ratemaking

function, moreover involves the making of "pragmatic adjustments" (cite omitted) Under the statutory standard of "just and reasonable" it is the result reached, not the method employed which is controlling (citations omitted)

The ratemaking process under the Act, i.e., the fixing of "just and reasonable" rates involves a balancing of the investor and the consumer interest. Thus we stated in the Natural Gas Pipeline Co. case, that regulation does not insure that the business shall produce net revenues. (citation omitted).

such considerations aside, the investor interest has a legitimate concern with the financial integrity the company whose rates are being regulated. From investor or company point of view it is important that there be enough revenue not only for operating but also for the capital costs of expenses These include service on the debt business. dividends on the stock. (citation omitted). By that standard the return to the equity owner should be commensurate with returns on investments in enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

320 U.S. at 602-603.

The validity of these decisions has not been eroded, as indicated by the language of the more recent decision of the Supreme Court in In Re: Permian Basin Area Rate Cases, 390 U.S. 747 (1968). This Commission has consistently operated within the guidelines set forth in the Hope decision. See also, Southern Bell, supra, 244 S.E.2d at 280-83.

The rate of return which the Commission has herein found to be fair and reasonable should enable the Company to maintain its levels of good service and preserve its financial integrity. Patently, however, the Company must insure that its operation and maintenance expenses remain at the lowest level consistent with

reliable service and exercise appropriate managerial efficiency in all phases of its operations. The Commission has consistently manifested its abiding concern for the establishment and continuation of efficiency programs on the part of its jurisdictional entities. The Commission reiterates its consistent statement that we are not inclined to be completely satisfied with the cost reduction and efficiency programs of any jurisdictional entity. Consequently, the Commission will continue to expect the Company to design and implement such programs in the future as an index of good management practice in the interests of its customers and of the Company itself.

In this Order, we have previously found that the capitalization ratios set forth in Table B are appropriate and should be used for ratemaking purposes herein. The Commission finds that the embedded cost rate for long-term debt of 9.86% is fair and reasonable for use in this proceeding. For the purposes of this proceeding, the Commission has herein found the proper cost rate for the Company's common equity capital to be in the range of 12.00%-12.25%.

Using these findings, the overall rate of return on rate base for the Company's South Carolina operations, based on a 12.00% rate of return on equity, may be derived as computed in the following table:

Table C
Overall Rate of Return

	Ratio	Cost	Weighted Cost
Long-Term Debt Common Equity	43.68% 56.32%	9.86% 12.00%	4.31% 6.76% 11.07%
Total	100.00%		

IX. Revenue Requirements.

The Company's total income for return after accounting adjustments and prior to any rate adjustment, for its South Carolina operations, is \$7,143,157. This amount, when divided by the Company's rate base of \$82,234,552 as calculated in Table A, produces a rate of return on rate base of 8.69%, as of January 31, 1991.

In order to achieve an overall rate of return on its South Carolina operations at the level of 11.07%, which this Commission has found to be appropriate and reasonable for the test year period for the reasons previously indicated, the Company would require additional revenues of \$3,015,150 from its South Carolina operations, which will produce an additional total income for return of \$1,956,248.

Total income for return, both before and after the approved increase, as found by the Commission, is illustrated as follows:

Table D Total Income for Return

Before Rate Increase	<u>Total</u>
Net Operating Income Customer Growth AFUDC	\$ 6,783,641 279,486 80,030
Total Income for Return	\$ 7,143,157
After Rate Increase	Total
Net Operating Income Customer Growth AFUDC	\$ 8,662,481 356,894 80,030
Total Income for Return	\$ 9,099,405

x. Allocation of Revenues.

The revenue requirements of the Company having been determined, the Commission is also concerned with the determination of the specific rates and the development of the rate structure that will yield the required revenues. It is generally accepted that proper utility regulation requires the exercise of control over the rate structure to ensure that equitable treatment is afforded each class of customer.

The three primary criteria of a sound rate structure have been set forth as follows:

objective, which takes the form of a fair-return standard with respect to private utility companies; (b) the fair-cost apportionment objective which invokes the principle that the burden of meeting total revenue requirements must be distributed fairly among the beneficiaries of the service, and (c) the optimum-use or consumer rationing objective, under which the rates are designed to discourage the wasteful use of public

utility services while promoting use that is economically justified in view of the relationships between costs incurred and benefits received.

Bonbright, Principles of Public Utility Rates (1961), p. 292.

These criteria stated above have been used by this Commission in past cases and are utilized again in this proceeding. The rate schedules approved for the Company produced percentage increases and decreases in revenues among the customer classifications. The revenues from the residential class (Rate 201) would increase by 5.35%; the revenues from the General Service class (Rate 202) would increase by 2.03%; the revenues from the Process Gas Service class (Rate 203) would increase by 7.48%; the revenues from the Large General Service class (Rate 204) would increase by 1.72%; the revenues from the Gas Light service class (Rate 205) would be increased by 0%; and the revenues from the transportation service class (Rate 213 and 214) would decrease by 11.88% and increase by 1.03%, respectively.

In approving the increases and decreases in the Company's various classes of service, the Commission has undertaken to recognize and reconcile the Commission's consistent ratemaking objectives to meet the revenue requirements found fair and reasonable. The Commission has considered the revenue increases and decreases for each class of service shown in Table E, infra, and finds the same to be fair and reasonable, and appropriate for this proceeding.

Table E

Approved Increase by Class

Class of Service	Approved Increase
Residential (Rate 201) General (Rate 202) Process Gas (Rate 203) Large General (Rate 204) Outdoor Gas Light (Rate 205) Interruptible Transportation (Rate 213) Interruptible Transportation (Rate 214) Other Revenue	\$ 1,372,692 368,887 742,673 536,631 -0- (120,014) 14,541 99,740
Total Increase	<u>\$ 3,015,150</u>

As per the proposal of the Staff and the Company, the Company will reduce its rates by \$2,635,563 on the effective date of the WNA tracker. The rate reduction will be allocated among the various rate schedules in the same manner as the rate increase in this proceeding was allocated.

Company witness Schiefer testified that in the Company's design of rates, it considered traditional rate design principles, the results of a cost of service study performed by Company witness Fleenor and the need to remain competitive. Tr., Vol. 3, Schiefer at 53. The "traditional rate design principles" included value of service, the need to avoid discrimination among classes of service, system load equalization and revenue stability. Id.

Company witnesses Schiefer and Fleenor testified that the cost of service study shows that under existing rates all classes of residential customers are contributing a negative return, while commercial year-around, industrial and interruptible customers provide returns above system average. Tr., Vol. 3, Schiefer at 55;

Tr., Vol. 3, Fleenor at 9. Therefore, the Company deemed it to be appropriate to first layer an increase on residential customers in an attempt to provide a positive return.

Consumer Advocate witness Griffin testified that, in his opinion, the Company's cost of service study does not correctly allocate expenses and rate base among the various customer classes; (Tr., Vol. 4, Griffin at 78.) however, he did not prepare a cost of service study nor did he show what the returns for any class of customer would be if expenses and rate base had been allocated as suggested by him.

The Company also proposed to increase its reconnect charges of \$5.00 to \$25.00 for a non-payment reconnect and from \$7.00 to \$25.00 for a seasonal reconnect. Tr., Vol. 3, Schiefer at 60. This Commission believes that \$10.00 is an appropriate fee for the non-payment reconnect and \$25.00 is appropriate for the seasonal reconnect. The Staff recommended changing the wording of Section 31 of the Company's Service Regulations to reference items (a) through (h) of Item 22 of the Service Regulations. Tr., Vol. 5, Sires at 25. The Commission finds that the increases as stated and changes to the Regulations are fair and reasonable.

The Company proposed also an increase from \$10.00 to \$15.00 on the Company's return check charge. Tr., Vol. 3, Schiefer at 60. We hold that this change is governed by S.C. CODE ANN.§34-11-70 (1976, as amended).

The Company proposed the following increases in basic monthly facilities charges: from \$8.00 to \$10.00 for small general service

(Rate 202); from \$100.00 to \$150.00 for large general service (Rate 203); and from \$200.00 to \$250.00 for interruptible industrial service (Rate 204). These were not contested by any party, therefore, the Commission grants the Company's requests for increases in these charges.

Several other rate design and tariff change requests were proffered by the Company that were unopposed and are, therefore, adopted by the Commission. These are: that the "heating only" rate in Small General Service Rate No. 202 be eliminated; that Small General Service Rate No. 202-A (Air-Conditioning) be eliminated, and an air-conditioning rate be included in Rate Schedule 202; that a rate for air-conditioning be included in Residential Rate No. 201; that Rate Schedules 202 and 203 be redesigned to reflect volumetric step rates to give a more equitable treatment to the customers; that identical step rates be incorporated into Rate Schedules 202 and 203; that miscellaneous amendments be made to the Company's Service Regulations to ensure compliance with past Commission Orders and the latest amendments to the Commission's Rules; and that a Section 33 be added to the Company's Service Regulations to clarify for its customers the criteria for qualifying for service under Rate Schedules 202, 203, and 204.

The Consumer Advocate recommended that the cost of service study be revised to reflect distribution mains and related expenses being allocated on 50% demand and 50% annual sales. The Consumer Advocate also proposed that the rates set by the Commission reflect this cost of service study. The Consumer Advocate's proposals in

this regard are rejected. The Commission believes that these recommendations are inconsistent with proper methodology for the performance of cost of service studies and should not therefore be reflected in the rates set by the Commission.

The Consumer Advocate has proposed requiring the Company to complete within the next six months a study that is currently being done for North and South Carolina operations to determine the level of excess accumulated deferred income taxes retained by the Company. The Commission so orders the Company. The Company shall make the study available to the Staff, the Consumer Advocate and any other party to this proceeding. Tr., Vol. 3, Miller at 129.

Consumer Advocate witness Miller has made a further proposal which must be denied by this Commission. The Consumer Advocate proposes that if the stipulation agreement entered into between the Commission Staff and the Company is adopted by this Commission, that this Commission review the Executive Long Term Incentive Benefits Plan again in a year, rather than adoption in this proceeding. The Commission believes that the Company has justified Commission adoption of this plan as of the date of this Order, for the reasons stated supra, therefore, this proposal is denied.

The Commission has carefully considered the entire record and believes that the rates attached hereto as Appendix A are fair and reasonable.

XI. Study of Allocation of Expenses Between Utility and Non-Utility Operations.

Consumer Advocate witness Miller proposed that the Commission order the Company to have Deloitte & Touche make a study of the allocation factors used to allocate costs between regulated and non-regulated operations. Tr., Vol. 3, Miller at 125. The Company opposed this recommendation because it will cause it to incur unnecessary expenses. Company witness Maxheim testified that several years ago Arthur Andersen & Co. was employed by the Company to perform a study of methods used by the Company to allocate expenses between utility and non-utility operations. This study was filed with and approved by the North Carolina Utilities Commission in 1981. The Company stated that it has followed the recommendations made by Arthur Andersen and these methods have been reviewed and approved by this Commission in each of the Company's rate cases since 1981. Tr., Vol. 5, Maxheim at 76-77. Commission is of the opinion and so finds that there is no reason to justify the expense of another study at this time; therefore, the Consumer Advocate's proposal is rejected.

XII. Findings and Conclusions.

Based upon the foregoing considerations and after a full review of the testimony, exhibits and complete record in this proceeding, the Commission has made the following findings and reached the following conclusions concerning the operations, the rate of return and the reasonable earnings requirements to be allowed the Company:

- 1. That Piedmont Natural Gas Company, Inc., is a gas utility and is subject to the jurisdiction of this Commission, pursuant to S.C. CODE ANN., SECTIONS 58-5-10, et seq. (Law Co-op. 1977);
- 2. That the appropriate test period for the purposes of this proceeding is the twelve-month period ending January 31, 1991;
- 3. That the Company in its Application is seeking an increase in rates and charges to certain customers in this proceeding that will produce additional revenues for the test year period of \$4,415,368;
- 4. That an end-of-test year, original cost rate base of \$82,234,552 consisting of the components set forth in Table A of this Order should be adopted for ratemaking purposes;
- 5. That the capital structure set forth in Table B of the Order should be adopted for this proceeding;
- 6. That the rate of return on the Company's operations, during the test year, after accounting and pro forma adjustments, and prior to any rate adjustments, was 8.69%;
- 7. That testimony provided that a fair and proper return on common equity for the Company which will be produced by additional revenues of \$3,015,150;
- 8. That the Company's embedded cost of debt of 9.86% and a cost rate of 12.00% on common equity should be used in the determination of a fair overall rate of return;
- 9. That the accounting and pro forma adjustments set forth in Section IV of this Order are reasonable and proper;
 - 10. That the total income for return after accounting and

pro forma adjustments and prior to rate adjustments, was \$7,143,157 for the test period, and that such amount of income is insufficient based on the reasonable rate of return found in this proceeding;

- 11. That approval should be given for rates and charges which will provide additional gross revenues to the Company of \$3,015,150 on its gas operations, which will produce an additional total income for return of \$1,956,248;
- 12. That the additional revenues allowed would produce a rate of return on approved rate base of 11.07% which is found to be fair and reasonable in this proceeding;
- 13. That such additional revenues and the return which these revenues produce are well within the range of reasonableness and fairness and must be provided if the Company is to meet all of its customer requirements;
- 14. That the additional revenues would provide a rate of return on common equity of 12.00%;
- 15. That the Company should be allowed to earn within a range of 12.00% to 12.25% on its common equity;
- 16. That the schedule of rates and charges attached hereto as Appendix A should be approved for service rendered on or after the date of this Order;
- 17. That the Company should file with the Commission for approval within five (5) days from the date of this Order, rate schedules which reflect the rates contained in Appendix A and tariffs reflecting the findings contained herein;
 - 18. That the Company should continue to file with this

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Commission, as previously ordered, quarterly reports showing:

- a. Rate of return on rate base;
- b. Return on common equity;
- c. Earnings per share of common stock; and
- d. Debt coverage ratio of earnings to fixed charges. 1
- 19. That effective on the first billing cycle in December 1992, the WNA tracker proposed by the Staff will become effective in the manner set forth in the agreement between the Company and the Staff and approved herein, as per the criteria either developed between the Staff, the Company, and the Consumer Advocate, or, in the alternative, as per the supplemental Commission Order.
- 20. That on the effective date of the WNA tracker, the Company will reduce its rates by \$2,635,563 annually, and the rate reduction will be allocated among the various rate schedules in the same manner as the rate increase approved herein was allocated, and that, prior to the effective date of the WNA tracker, the Company should file rate schedules which reflect the reduction.

IT IS THEREFORE ORDERED:

- 1. That the proposed rate schedules filed by the Company on May 24, 1991, are unreasonable and improper and are hereby disapproved; that the rate schedules as stated in Appendix A are reasonable and proper and are hereby approved.
 - 2. That the rate schedules as stated in Appendix A shall be

^{1.} Note: The cost of gas and revenues are to be annualized during the twelve-month period prior to implementation of the WNA.

effective as of the date of this Order.

- 3. That the Company file all reports herein identified in accordance with the findings contained herein.
- 4. That the Company shall develop and implement a program to educate its customers with regard to the Weather Normalization adjustment prior to implementation of the adjustment in 1992.
- 5. That this Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Marjaie amas Grazie

ATTEST:

executive Directo

(SEAL)

RATE SCHEDULE 201 Residential Service

Heat Only Facilities Charge winter summer	\$ 3.00 .68546 .60670	
Year Round Facilities Charge winter summer	\$ 3.00 .65670 .60670	
Public Housing Facilities Charge winter summer	\$ 0.00 .65670 .60670	

RATE SCHEDULE 202 Small General Service

Facilities Charge Winter (Nov -		\$ 10.00		
First 1,000		.61695	per	therm
Next 4,000		.57766	per	therm
Next 10,000		.50695	per	therm
Over 15,000		.44195	per	therm
Summer (Apr -	Oct)			
First 1,000		.53695	per	therm
Next 4,000		.48695		
Next 10,000		.42195	per	therm
Over 15,000		.37695	per	therm

General RATE SCHEDULE 202-A Service - Air Conditioning

Facilities Charge

\$ 10.00

\$.075 per therm discount off Rate Schedule 202 for usage during the months of May through September.

RATE SCHEDULE 202-B General Service Motor Fuel

Facilities Charge	\$ 10.00		
Winter (Nov - Mar)	.52500	per	therm
Summer (Apr - Oct)	.52500	per	therm

RATE SCHEDULE 203 Large General Service

Facilities Charge	\$150.00	
Winter (Nov - Mar)		
First 1,000	.61695 per	therm
Next 4,000	.57766 per	therm
Next 10,000	.50695 per	therm
Over 15,000	.44195 per	therm
Summer (Apr - Oct)		
First 1,000	.53695 per	therm
Next 4,000	.48695 per	therm
Next 10,000	.42195 per	therm
Over 15,000	.37695 per	therm

RATE SCHEDULE 204 Interruptible Service

Facilities Charge	\$250.00
Winter (Nov - Mar)	
First 15,000	.39745 per therm
Next 15,000	.39745 per therm
Next 75,000	.38245 per therm
Next 165,000	.36745 per therm
Over 270,000	.35745 per therm
Summer (Apr - Oct)	
First 15,000	.37445 per therm
Next 15,000	.36345 per therm
Next 75,000	.35245 per therm
Next 165,000	.33745 per therm
Over 270,000	.32745 per therm

RATE SCHEDULE 205 Outdoor Gaslight Service

Each fixture connected \$7.50 per month.

RATE SCHEDULE 213 Large General Transportation Service

Facilities Charge Winter (Nov - Mar)	\$150.00		
First 1,000	.35945	per	therm
Next 4,000	.32016	per	therm
Next 10,000	.24945	per	therm
Over 15,000	.18445	per	therm
Summer (Apr - Oct)			
First 1,000	.27945		
Next 4,000	.22945		
Next 10,000	.16445		
Over 15,000	.11945	per	therm

RATE SCHEDULE 214 Interruptible Transportation Service

Facilities Charge Winter (Nov - Mar)	\$250.00
First 15,000	.13995 per therm
Next 15,000	.13995 per therm
Next 75,000	.12495 per therm
Next 165,000	.10995 per therm
Over 270,000	.09995 per therm
Summer (Apr - Oct)	
First 15,000	.11695 per therm
Next 15,000	.10595 per therm
Next 75,000	.09495 per therm
Next 165,000	.07995 per therm
Over 270,000	.06995 per therm